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*Amendment*  
*Attorney Docket No. S63.2B-10062-US01*

**Remarks**

Claims 17-27 and 29-36 are now pending.

An interview was held with Examiner Susan Nolan-Rayford on November 16, 2004 at which the applicant described the claimed process, in particular the feature that the chain extended reaction product was prepared in the melt from which the medical device was formed. Applicant pointed out that neither Chen et al (US 5,554,120) nor Loontjens et al (US 6,228,980) teach to produce a medical device or medical device balloon from a chain extended polymer without remelting the polymer.

Examiner Nolan-Rayford did not agree that the claim language, as submitted in the amendment of November 10, 2004 adequately articulated the concept that there was no intervening melt between formation of the reaction product and the medical device. The Examiner also stated that applicant should consider submission of comparative evidence to show that the shaping of articles from their chain-extended polymers immediately after reaction gives beneficial results when compared to letting the chain-extended polymers sit prior to shaping.

Applicant is currently considering how to design and implement a suitable experimental protocol to satisfy the Examiner's suggestion. In the meantime the product claims have been cancelled without prejudice to submission in a continuing application.

Method claim 17 has been amended to recite a processing sequence for forming a medical device balloon comprising:

preparing a polymer composition in melt form, and then  
extruding the polymer composition to form tubing and  
blowing a segment of the tubing to form the balloon,  
without remelting the composition,

This is a conventional recitation of a process for preparing medical device balloons which is followed in the specification Examples. It is submitted that this description is fully supported by the specification. Claim 17 then recites formation of the composition as a melted reaction mixture in specific relation to the preparing step already recited and also specifically recites that the components are reacted:

wherein the step of preparing the polymer composition in melt form comprises  
forming a melted reaction mixture comprising  
a) at least one terminally reactive polymer and  
b) a chain extender and

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reacting the reaction mixture.

It is submitted that claim 17 is now unambiguous. The reaction mixture of polymer and chain extender is reacted, and the reacted reaction mixture is extruded to form the tubing, *without remelting*.

Claim 29 similarly first recites conventional steps in preparing a medical device, namely:

preparing a polymer composition in melt form, and then forming at least a portion of the medical device from the polymer composition without remelting the composition.

Claim 29 then describes the polymer preparation step:

wherein the step of preparing the polymer composition in melt form comprises forming a melted reaction mixture comprising

- a) at least one terminally reactive thermoplastic polymer, and
- b) a chain extender and reacting the reaction mixture.

Claim 29 is also unambiguous. The reacted reaction mixture is prepared and then formed into at least a portion of the medical device *without remelting*.

With respect to both independent claims 17 and 29, it will be understood from the application that the steps of forming a melted reaction mixture and of reacting the reaction mixture may be concurrent or sequential, and can be performed by providing the polymer and chain extender components a suitable residence time in a mixer such as an extrusion blend mixer. Further the reaction mixture may be formed as a batch mixture or a continuous-feed mixture.

The amendments to claims 22, 26, 27 and 34-36 are being made to conform to the changed antecedent in claims 17 or 29.

The rejection on Chen et al (US 5,554,120) in view of Loontjens et al (US 6,228,980) asserts the obviousness of using a polymer that has been chain extended per Loontjens et al as a starting material for a melt from which the Chang balloons are formed. Applicant's claims do not read on such process. Accordingly the withdrawal of the rejection of claims 17 and 29, and the claims depending therefrom, is respectfully requested.

### *Conclusion*

The application has been amended to delete the product claims and remove the

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grounds of the obviousness rejection of the method claims. The application is therefore believed to be in condition for allowance. Early and favorable action thereon is requested.

Respectfully submitted,

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